

Many useful Inventions are already brought to perfection, and published; and many more are dextrously commenced.

In the Preface to my last foregoing Volume, I solicited for Natural Histories of Countries: And now I see very much done in that kind; and I hear of much more in the hands of many judicious Philosophers, learned Gentlemen, industrious Students, and noble Travellers. And ingenious Travellers are now furnished with extraordinary accommodations, that were not known to former Ages; such as Thermometers, Baroscopes, Hygrosopes, Microscopes, Telescopes, Micrometers, exact Scales and Weights, promptly to weigh Liquors, and, with other circumstances, to examine the intrinsic value of all Coins and Medals or Metals; Pendulum Watches, Instruments and Indexes for Magnetical Variations, and Inclinary Needles, and other helps to come to ascertain Longitudes; and other Mechanical Contrivances for manifold Uses. And every branch of Mathematicks, pure and mixt, Arithmetick, Geometry, Astronomy, Architecture, all Ingenious Arts are daily rendred more easie and more pregnant.

These the most Intelligent and Industrious, being some of them in full Bodies associated, well settled and devoted for solid Truth in all our best Academies; and others led by their own Genius and Affairs, to undertake inquisitive Journeys by Sea and Land; we cannot suspect a Relapse, nor fail of a perpetual Progress in sound and useful knowledge, to the satisfaction of all the Ingenious.

Some Agrestic Observations and Advertisements, from Dr. John Beale communicated to the Publisher.

I*N Devonshire they mingle black Mulberries fully ripe, with a full bodied Cider in the time of grinding or pressing the Apple, with discretion for tincture and relish: And there they esteem it a very wholsom and stout wine. Of this Mulberry-cider, some notice was given from Devonshire long since, as may be seen in the Phil. Transact. Vol. 2. Numb. 27. p. 503. Sept. 1667.*

'Tis strange, that in nine or ten years since this was published, the practise hath not been spread into other Countries, where they abound with strong and winy Cider; many being willing that their Cider should in tincture resemble Claret, Tent, or Alicant wine.

But it may seem, that we do yet retain somewhat of our Fathers aversness from planting Mulberries, which they shewed near the begining of King James his Reign, to our great loss and shame.

thame. This Ingenious and Learned Kings most obliging and admirable Letter to all the Lords and Deputies Lieutenants, and to all the Gentry and Ingenious, may yet be seen in *Hartlib's Legacy*, 14th. Decr. p 59. edit. 4^e.

Of this I am sure (for I had a hand in promoting it with Mr. *Hartlib*, An. 1651, 52, 53.) that Silkworms will prosper and work very kindly in *England*, as far as they were tried. In the North of *Cheshire* and in *Huntingtonshire*, and in *Ireland* in the County of *Garvagh* in *Ulster*, a moister place than most parts of *England*, some of my acquaintance gathered from their own Silkworms, silk enough to knit for themselves gloves, stockings, and waistcoats of silk. The want of Mulberies was only then their discouragement; which did put them to make unprosperous trials upon other leaves: I think, the Raspy-leaf and Strawberry-leaf was least hurtful to the worms, but none besides Mulbery-leaves sufficient for their work.

And the fairest Mulbery, both for the fruit and for the liquor, and the Marmalade they made of it, were in highest esteem in *Italy* when *Rome* was in her height for luxury; generally prefer'd before any fruit they had entertain'd from *Africa* or *Asia*, or other parts of their wide Dominions, some hundreds of years before they had any thought of *Aurelian* silk in *Italy* or *Naples*. I will prove it:

*Cum canis Erigones flagrans Hyperionis æstu
Arboreos aperit fœtus, cumulataque moris
Candida sanguineo manat fiscella cruore,
Tunc præcox biferâ descendit ab arbore ficus,
Armenisique, & cæreolis, prunisque Damasci
Stipantur calathi, & pomis quæ barbara Persis
Miserat —*

Here the Mulbery hath the precedence before the fairest Fig, the Abricot, Prunes of the best sorts, and the Peach which (he saith) had forsaken the noxiousness which it had in *Persia*, by the change of soyl in *Italy*.

Ambrosios præbent succos oblita nocendi.

He goes on with other Pavies or Peaches from *Persia*, and other fruits in highest esteem.

And *Palladius* (at least 200 years after *Columella*) teacheth to make the Quidenie of Mulberies, called Diamoron, of the Juice of Mulberies, without any other mixture, only boyled

with hony (they had no other sugar then, for their Marmalades) to a consistence. *Tunc duas partes succi ipsius & unam mellis miscbis, & mista curabis ad pinguedinem mellis excoquere*, *Pall. Sept. tit. 16.* And he shews, how the Mulberry may be grafted on the Fig; and how propagated best rather by the offset or truncheon, than by the spade; *Mori nascuntur, ex semine, sic & poma & virgulta degenerant. Serenda est taleis vel cacuminibus, melius autem taleis sesquipedalibus, ac fimo oblitis*; *Feb. Tit. 25.* *Constantine* confirms the same, *l. 10. c. 69. & 70. Palladius* (in the last recited place,) shews how the Mulberry may be grafted on the Fig, or the fairest Mulberries on the Vulgar, only by grafting within the rind: *Inseritur infico, & in se tantum sub cortice.* He was an illustrious person, and had large Mannors or Territories in *Italy, Naples, and Sardinia*; and he omits nothing of worth; yet neither he, nor any one of the ancient Greeks and Latins, hath so much as a hint of the Silken trade. The Mulberry requireth a rich, succulent and rank ground, which is not wanting in the approaches of any of our Cities and Towns, And Mr. *Evelyn* hath written as well as can be written, both to instruct, and to encourage the planting of Mulberries, *Sylva ch. 9. 2^a. Edit.* And this is a seasonable and sufficient hint for Gardners and Nursery-men, particularly for those that have good and strong Cider.

The white Mulberries (as we call them) are for the finest silk; but for our present intentions, to mingle with Cider, and for our Junktets, (as *Palladius* hath hinted to us) we should send for the most delicious Mulberries, which may be had in *Naples, Sicily, Virginia*, or any of the *East or West-Indies*: Not trusting to the Seed, for the cautions we have from *Constantine l. 10. c. 69.* and from *Palladius, Febr. Tit. 25. Morus*; but by all means, to have young Plants of the best sorts, sent in boxes, containing some of the connatural soyl. Thus, if the Gardens about *London* were well furnish'd, they might easily be dispersed into other parts, without more ado: For, few plants may be more easily propagated, when they are young. A few rooted Mulberries, being press'd down, and cover'd with earth in fit places, so that the eyes may be very lightly cover'd, and the sprouts or branches (if there be any) may be cut very near to the ground; or a good branch, after due depth of the bigger end in the rich mold, thus order'd as before, will soon become a perpetual Nursery,

fery. And if the worst Mulberies were well dispersed, they may be soon amended by putting the largest black Mulbery upon that of the small kind; it being certain, that it takes better upon that, than upon the white Mulbery, saith the experienced *Le Gendre*, where he directs the most agreeable Graffings and Inoculations, p. 53. If it be objected, That 'tis a tedious curiosity to send so far for the sweetest Mulberies and the most vinous: I answer, that some good men may be of another judgment; and very few were hitherto aware of our twofold concernment, which is here demonstrated experimentally. And every year we have many Exotics (at great charges, and of much less worth) imported; too many, meerly to be consumed here, and to excite and foment luxury: whereas these are permanent amongst us, and to be propagated in all parts for the great benefit of all *England*. And all that are hearty for the Advancement of their own Nurseries, may for their own profit, take (under the same care) this, and all the useful Vegetables herein mentioned.

2. This is the season to plant and propagate by seed, suckers, offsets, slips, truncheons, or to graff (as is best agreeable to the several kinds) the Portugal Quince, the fairest Warden, the two sorts of French Chestnuts, the largest Welshnut, or Walnut, the best Filberds which are sweeter to many than the Jordan Almond, (and Almonds and excellent Figs do grow here kindly by a little help of a sunny bank,) and the black cluster Grape, and the best white Grape, and many other Grapes fit for our Climate, both for food and for wine. *Columella* shows l. 3. 9. *quomodo Amineas feraces facias*; how one excellent Vine may be propagated all over a Province speedily; how in two years, two acres of Vineyards were fully stored from one Vine by grafting, and to an incredible abundance of wine. Great choice of all these, and of many other excellent, fruitful and delicious plants may be had from the *London* Gardiners for all *England & Wales*.

3. Vinous shrubs are now coming into fashion; of these do some make Sugar-wines by art, to be compared (for wholesomeness and pleasantness to many palates) with rich wines of the Grape. For the *Sugarcane* doth hardly yield to any Vine in the world, or other Plant, saith *Ligon* (a man of a judicious gust) p. 85. and Mr. *J. W.* in his *Vinet. Brit.* hath well recommended these *Vinetum* shrubs; and directed the manner of making and ordering these Vines; and (God willing) it shall shortly be more fully,

ly, or at least in greater variety, directed by the experience and approbation of Persons of Honour & of curious judgment. Good choice may be had of these Plants from Mr. *R. Ball* of *Brainford* for the Western Road; and we hope, their Meath, Metheglin, and their Hony-drinks will in a short time give place to these Sugar-wines, when perfectly well made; Hony being better for the Apothecaries, and far dearer than Sugar, if some joyn to buy sugar in grofs, 1000 or 200 l. weight at a time, or more, immediately from the *American* Merchants. And besides, 'tis good imployment for poor women and children to gather the fruit; and a special improvement of our waste Lands and Heaths by the help of the Plough and Spade, only by turning the Turf, and burnt Heath, (if there be any) into the trenches or pits made by the Plough or Spade, for banks or beds. Doubtless *Diamorum* abovementioned will be much amended by sugar, instead of hony then used.

4. And since some parts of *England* have yet need of Importunity for hortulan improvements, I beg leave to transcribe out of the *Gazetts*, as follows: *Garden seeds* of all sorts may be had in small or great quantities, of Mr. *Yard*, at the *Red Cross* and *Golden Lyon* in *Soper lane* near *Cheapside*; the ancient place for Garden seeds in *London*.

5. *Hopclover*, or the largest *Trefoil*-seed, which is said to improve Lands not worth six shillings *per acre*, for pasture, to be worth twenty, or thirty shillings (mentioned in *Phil. Transf. Vol. 3. N. 37. p. 725.*) is cleaned from the husk, and other seeds, by Mr. *R. Hainers* of *Sullington* in *Sussex*; and may be had at the *Cross Keys* in *Lumbard-street*, or at the *Naked Boy* in the *Strand*, with a Bill directing the use of it. And the same Hopclover-seed, from the first years husked seed, and cleaned from all coarse Grass-seed, may be had from Mr. *Jacob Robert* Junior, in the *Physick Garden* at *Oxford*; and of Mr. *George Sidley* Sadler, at the *Falcon* in *Fleet-street*, where likewise very good *St. Foine* may be had. And I hope, and pray heartily, that this may be the blessed season, in which our Right Honorable and worthy Patriots, shall devise & countenance such Expedients, as themselves shall judge to be most effectual to recover and revive our Domestic Trade, and to promote Real Improvements all over *England* and *Wales*.—*The rest of this Letter is reserved for the Tract of April, that the Reader may not fail of variety.*